D. AMENDMENTS TO THE DRAWINGS

There are no amendments to the drawings.

E. REMARKS

The present invention is directed to a filter rack for a forced air-circulating system, and to methods of assembling such a filter rack for insertion into a forced air circulation system. The filter rack comprises a plurality of longitudinal members having a first flange adapted to receive and retain a filter and a second flange for mounting in an air handling system and having channels adapted to receive and retain a connector, each longitudinal member adapted for connection to at least one other longitudinal member to form a rectangular frame; and a plurality of connectors adapted for insertion into the channels for connecting each longitudinal member to at least one other longitudinal member.

The method of assembling a filter rack for a forced air-circulating system comprises the steps of providing a plurality of longitudinal members, each longitudinal member having a first flange adapted to receive and retain a filter and a second flange for mounting in an air handling system having channels adapted to receive and retain at least one connector, each longitudinal member adapted for connection to at least one other longitudinal member to form a rectangular frame, the longitudinal members comprised of a front, at least two sides, and a back; providing a plurality of connectors adapted for insertion into the channels for connecting each longitudinal member to at least one other longitudinal member; and connecting each longitudinal member to at least one other longitudinal member using the plurality of connectors so as to form a rectangular frame.

Significantly, the filter rack, by definition and as described at Paragraph 0004 of the Specification, is designed to hold a filter, and to be positioned in an air handling system, such as between the ducting and air intake of an HVAC system. The filter rack of the present invention is not a filter, and is not obvious in light of prior art filters known to those skilled in the relevant art.

Status of the Claims

Claims 1 – 20 are pending in the subject application. This amendment is provided in response to the Office Action dated July 28, 2005.

35 U.S.C. 102(b) Rejections

The Examiner rejected claims 1-10, 14, and 17-19 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent 4,963,171 to Osendorf (hereinafter "Osendorf"). In particular, the Examiner stated:

> Osendorf teaches a filter rack (18) comprising a plurality of longitudinal members (34) having flanges adapted to receive and retain a filter (16), and a plurality of connectors (46) adapted for insertion into corresponding channels (44) of the longitudinal member for connecting each longitudinal member to at least one other longitudinal member (see details of Fig.4, col. 4, lines 10-31). Osendorf further teaches the longitudinal members comprised of a corrosion resistant rigid material such as aluminum (col.3, lines 64-66), and the connector (46) being a L-shaped flat connector including at least one fastener (see 51 in Figs. 5 & 6) which is clamp. Osendorf also teaches a method of assembling a filter rack comprising the steps of providing a plurality of longitudinal members (34), each longitudinal member (34) having flanges adapted to receive and retain a filter (16) and having channels (44) adapted to receive and retain at least one connector (46), providing a plurality of L-shaped connectors (46), connecting each longitudinal member to at least one other longitudinal member using the plurality of connectors so as to form a rectangular frame (see Fig. 4).

Applicants respectfully traverse the rejection of claims 1-10, 14, and 17-19 under 35 U.S.C. §102(b).

Osendorf, as understood, is directed to a high efficiency (HEPA) filter assembly having a generally rectangular pleated filter element with ends defined by the pleated edges of the element and sides defined by the generally planar side edges of the element. The filter element is mounted in a generally rectangular housing formed by two pairs of oppositely disposed frame members that are joined together. Each frame member has a planar base member and a pair of upright side members defining an open ended channel to receive the ends and sides of the filter element. At least one spacing member extends along the base portion to space the ends and sides of the filter element from the surface of the planar member. A dam member is provided at each end of one of the pairs of planar members to enclose the channel, and a sealant is disposed in the channel and the ends of the filter element are embedded in the sealant. The inclusion of a

dam member and a sealant is key to the invention taught in Osendorf, as described at Column 2, lines 45-50:

> The dam means serves to retain sealant within the channel defined by the planar base member and its upright members during assembly and prevent the displacement of the epoxy over the ends of the frame member where it must subsequently be cleaned.

Significantly, the filter of Osendorf is a framed filter assembly in which the filter element is sealed or adhered to a frame member by hardened sealant. The invention taught by Osendorf also includes a method of permanently assembling and sealing the frame and filter element as described at Column 2, line 60 through Column 3, line 17:

> The method includes building a U-shaped frame by joining the side members of the frame to the bottom member. The channel in the bottom member is filled with a sealant in a liquid or viscous state. The filter element is inserted in this partially assembled frame with its pleated edges at one end of the element immersed in the sealant and spaced apart from the surface of the bottom member by the ribs with its flat sides in the channels of the side frame members. Ribs also space the flat sides of the element from the surface of the frame member. The sealant in the bottom frame member is allowed to harden. Then the top frame member is joined in a similar manner to the side frame members to complete the assembly. The channel of the top frame member is filled with sealant in its viscous state. The top pleated ends of the filter element are immersed in the sealant which is retained in the channel by the adhesive tape dam members. The ends of the side frame members engage the tape and fold it inwardly upon itself immersing the tape in the sealant as the ends of the side members and top member are joined together. The sealant is allowed to harden. The assembly is completed by depositing additional

sealant to the extent necessary in the channels of the side members to ensure a seal between the sides of the element and the frame side members.

One or more of the features recited by Applicant in amended independent claims 1, 14, and 17 are not taught or suggested by Osendorf, as further described herein.

First, Osendorf does not motivate, teach, or suggest a filter rack. Rather, Osendorf is directed to a filter having a frame member permanently adhered to a pleated filter element to form a filter unit. As cited above, Osendorf is directed at high-efficiency (HEPA) filters having a filter element permanently sealed to frame members to form a rectangular framed filter. Osendorf does not teach a filter rack, and the invention of Osendorf cannot be utilized as a filter rack, as further explained herein.

First, a filter rack is used to retain removable filter in an air handling system. The invention of Osendorf cannot utilize a removable filter element. In fact, Osendorf teaches away from the use of filter elements that could be removed from the frame member as inferior (See Osendorf at Col.1,line 44-46 "Prior art HEPA filters fabricated according to conventional processes have experienced leaks between the filter element and the frame. Such leaks commonly occur at the corners where the adjacent frame members are joined."). Simply put, the filter of Osendorf is not a filter rack, and one skilled in the art would distinguish between a filter and a filter rack.

Indeed, the filter rack of the present invention could be used in conjunction with the filter assembly of Osendorf, since the filter rack of the present invention includes longitudinal members having first flanges designed to receive and retain a framed filter element. As cited by the Applicant at Para [0004], "Filters are commonly provided at the terminus of the return air flow ducting so that air is filtered before re-entering the air intake for the furnace or air conditioner. Such filters are held by filter racks that are positioned between the ducting and the air intake." (Emphasis added). Nothing in Osendorf teaches or suggests that the assembly of Osendorf is suitable for use as a filter rack.

Without conceding any of the above arguments, Applicant has amended claims 1, 14 (and 17) to recite a more particular filter rack assembly having a first flange for retaining a filter and a second flange adapted for mounting into an air handling system, such as by attachment to

ductwork or air handling equipment. Osendorf does not teach any assembly having second flanges for mounting in an air handling system. The specification at Paragraph [0019], lines 18-21, as well as Figs. 2, 3, and 5 serve as the basis for the above claim amendments. Therefore, no new matter is added. Applicant believes that the amendments to claims 1, 14 and 17 hereunder make the Examiner's rejection of claims 1-10, 14, and 17-19 under Section 102(b) moot.

With respect to the dependent claims 2-10 and 18-19, the additional limitations of the filter rack are not anticipated by Osendorf, since Osendorf's teachings do not produce a filter rack that can be installed in an air handling system to retain a filter. Also, claims 2-10 and 18-19 are allowable as depending from an allowable independent claim.

Thus, since Osendorf does not teach or suggest all of the limitations recited in independent claims 1, 14, and 17, Applicant respectfully submits that Osendorf does not anticipate Applicant's invention as recited in claims 1-10, 14, and 17-19.

35 U.S.C. 103(a) Rejections

The Examiner has rejected claims 11-13, 15-16 and 20 under 35 U.S.C. §103(a) as being unpatentable over Osendorf in view of U.S. Patent 5,059,218 to Pick ("Pick"). The Examiner stated:

> Claims 11-13, 15, 16 and 20 call for the filter rack comprising a door that is attached to the at least one longitudinal member by removable attachment means. Pick discloses a filter rack (34) comprising a door (50) that is attached to the at least one longitudinal member (40) by removable attachment means (52) (see 50 in Figs. 2B & 2C, col. 4, line 64 through col. 5, line 27). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a door as taught by Pick on the filter rack of Osendorf since the door would provide access and help facilitate the assembly and disassembly of the filter element in and off the filter rack.

The following principle applies to all Section 103 rejections. MPEP 2143.03 provides, "To establish prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165

USPQ 494, 496 (CCPA 1970)." [Emphasis added.] That is, to have any expectation of rejecting the claims over a single reference or a combination of references, each limitation must be taught somewhere in the applied prior art. If limitations are not found in any of the applied prior art, the rejection cannot stand.

Applicant submits that the limitations of claims 11-13, 15-16, and 20, which depend from currently amended claims 1, 14, and 17, are not taught by Osendorf, Pick, or any combination thereof. Neither Osendorf nor Pick teach filter racks of any type, since both Osendorf and Pick teach only filters. Without conceding that argument, Applicant submits that the amendments to independent claims 1, 14, and 17, from which claims 11-13, 15-16, and 20 depend, makes moot the rejection of claims 11-13, 15-16, and 20 under 35 U.S.C. §103(a) over Osendorf in view of Pick. Specifically, neither of those cited references teach or suggest filter rack, let alone a filter rack having the limitations claimed by Applicant, as previously described under the Section 102(b) arguments hereof. Additionally, these claims are allowable as depending from allowable independent claims, and Pick doesn't teach or suggest the limitations missing from Osendorf.

Accordingly, the Examiner's rejection of claims 11-13, 15-16, and 20, which add additional limitations to amended claims 1, 14, and 17, respectively, is moot. Applicant requests withdrawal of the rejection under 35 U.S.C. § 103, and consideration and allowance of claims 11-13, 15-16, and 20.

Applicant has amended the claims, and submits that no new matter results from the amendments. No new matter is presented by this amendment.

F. CONCLUSION

In view of the above, Applicant respectfully requests entry of this amendment, reconsideration of the Application and withdrawal of the outstanding rejections. As a result of the amendments and remarks presented herein, Applicant respectfully submits that independent claims 1, 14, and 17, as amended, are neither anticipated by the cited prior art nor rendered obvious. Thus, dependent claims 2-13, 15-16, and 18-20 are not rendered obvious by the cited art.

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As the claims are not anticipated by nor rendered obvious in view of the applied art, Applicant requests withdrawal of the outstanding rejections and allowance of claims 1-20. If the Examiner believes that prosecution of this Application could be expedited by a telephone conference, the Examiner is encouraged to contact applicant's attorney at the phone number listed below.

The Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,

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